

## CLAIMS

1. A contents storage system including: a home server apparatus  
for recording therein contents; and an information supply  
5 apparatus for supplying the home server apparatus with section  
information that shows how the contents are each divided into  
sections,

the information supply apparatus comprising:

a storage unit operable to store therein a plurality of  
10 pieces of section information corresponding to a plurality of  
contents; and

a supply unit operable to read first section information,  
which corresponds to a content recorded in the home server  
apparatus, from the storage unit and supply the home server  
15 apparatus with the first section information,

the home server apparatus comprising:

a contents recording unit operable to acquire and record  
the content;

a receiving unit operable to receive the first section  
20 information from the information supply apparatus;

a generating unit operable to generate second section  
information corresponding to the recorded content; and

a section information recording unit operable to record  
therein either the first section information or the second section  
25 information, as being in correspondence with the recorded  
content.

2. A home server apparatus for receiving section information, which shows how contents are each divided into sections, from an information supply apparatus, the home server apparatus comprising:

5       a contents recording unit operable to acquire and record a content;

      a receiving unit operable to receive first section information, which corresponds to the recorded content, from the information supply apparatus;

10       a generating unit operable to generate second section information corresponding to the recorded content; and

      a section information recording unit operable to record therein either the first section information or the second section information, as being in correspondence with the recorded  
15   content.

3. The home server apparatus of Claim 2, wherein

      each content is theoretically divided into meaningful sections that are each cohesive in substance, and

20       sections indicated by the first section information are more close to meaningful sections of the recorded content than sections indicated by the second section information in length.

4. The home server apparatus of Claim 3, wherein

25       the first section information is generated based on amounts of a plurality of types of characteristics detected through analysis of images and audio information contained in the recorded

content, and

the generating unit generates the second section information based on amounts of less types of characteristics than the types of characteristics on which generation of the first section information is based.

5. The home server apparatus of Claim 4, wherein

the generating unit generates the second section information based on amounts of audio detected through analysis of audio information contained in the recorded content.

6. The home server apparatus of Claim 2, wherein

the receiving unit includes:

a requesting sub-unit operable to request the information supply apparatus to supply the first section information by sending identification information for identifying the recorded content to the information supply apparatus; and

a receiving sub-unit unit operable to receive the first section information from the information supply apparatus, wherein

the generating unit generates the second section information only if the information supply apparatus does not supply the home server apparatus with the first section information in response to the requesting, and

the section information recording unit records therein the first section information as being in correspondence with the recorded content if the information supply apparatus supplies

the home server apparatus with the first section information,  
and records therein the second section information as being in  
correspondence with the recorded content if the information  
supply apparatus does not supply the home server apparatus with  
5 the first section information.

7. The home server apparatus of Claim 6, wherein  
the requesting sub-unit further sends criterion  
information, which is used for judging whether the first section  
10 information can be supplied, together with the identification  
information to the information supply apparatus, and

the section information recording unit records therein  
the first section information as being in correspondence with  
the recorded content only if the information supply apparatus  
15 judges based on the criterion information that the first section  
information can be supplied and the receiving sub-unit receives  
the first section information from the information supply  
apparatus.

20 8. The home server apparatus of Claim 7, wherein  
the criterion information sent by the requesting sub-unit  
indicates a level of performance of the generating unit in  
generating the section information.

25 9. The home server apparatus of Claim 6, wherein  
each piece of section information indicates each section  
of each content by a start time of each section, and

the generating unit generates the second section information by determining the start time of each section through analysis of the recorded content.

5 10. The home server apparatus of Claim 9 further comprising:

a time correcting unit operable to correct the start time of each section indicated by the first section information by: receiving from the information supply apparatus (i) a portion of audio data of a content identified by the identification  
10 information and (ii) a reproduction time for the portion of audio data, the reproduction time having been measured by a same clock that has measured start times indicated by the first section information; calculating a difference between (iii) a reproduction  
15 time for the portion of audio data of the recorded content and (iv) the reproduction time received from the information supply apparatus; and correcting the start times indicated by the first section information by the calculated difference.

11. The home server apparatus of Claim 9 further comprising:

20 a selecting unit operable to select one of sections indicated by a piece of section information that has been recorded in the section information recording unit in correspondence with the recorded content; and

a reproducing unit operable to reproduce the recorded  
25 content from a start time of the selected section.

12. The home server apparatus of Claim 11, wherein

the section information indicates, for each section, a characteristic image display time being a time at which an image, which is used to determine what each section concerns, is displayed,

5 the home server apparatus further comprising:

a presentation unit operable to display, as a list, images that are to be displayed at characteristic image display times indicated by the section information, wherein

the selecting unit selects a section that corresponds to  
10 an image that a user selects from the displayed list of images.

13. The home server apparatus of Claim 6, wherein

the information supply apparatus stores a plurality of pieces of section information for each content,

15 the requesting sub-unit further sends selection criterion information, which is used by the information supply apparatus to select a piece of section information, to the information supply apparatus, and

the receiving sub-unit receives a piece of section  
20 information that was selected based on the selection criterion information, from the information supply apparatus.

14. The home server apparatus of Claim 13, wherein

the information supply apparatus stores a plurality of  
25 pieces of section information for each content, the plurality of pieces of section information respectively corresponding to a plurality of broadcasting areas, and

the selection criterion information indicates a broadcasting area to which the home server apparatus belongs.

15. The home server apparatus of Claim 13, wherein

5       the requesting by the requesting sub-unit is inhibited while the contents recording unit is recording a content, and is executed after the contents recording unit records a content,

the generating unit generates third section information while the contents recording unit records a content, the third  
10 section information corresponds to sections of the currently recorded content that have already been recorded by the contents recording unit, and

the section information recording unit records therein the third section information as being in correspondence with  
15 the currently recorded content if the contents recording unit is in the middle of recording the content, and records therein the first section information as being in correspondence with the content if the first section information is supplied after the content is recorded.

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16. The home server apparatus of Claim 6 further comprising:

a communication judging unit operable to judge whether a communication with the information supply apparatus is possible, wherein

25       if the communication judging unit judges that a communication with the information supply apparatus is not possible, the requesting by the requesting sub-unit is inhibited,

the generating unit generates the second section information, and the section information recording unit records therein the second section information as being in correspondence with the recorded content.

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17. The home server apparatus of Claim 6 further comprising:

a request receiving unit operable to receive from another home server apparatus (i) identification information for identifying a predetermined content stored said another home server apparatus, and (ii) criterion information to be used for  
10 judging whether a piece of section information for the predetermined content can be supplied;

a judging unit operable to judge based on the criterion information whether to supply said another home server apparatus  
15 with the piece of section information for the predetermined content; and

a supply unit operable to supply said another home server apparatus with the piece of section information for the predetermined content if the judging unit judges positively and  
20 the piece of section information for the predetermined content is stored in the section information recording unit, wherein

if the judging unit judges positively and the piece of section information for the predetermined content is not stored in the section information recording unit, the generating unit  
25 generates the piece of section information for the predetermined content, and the supply unit supplies said another home server apparatus with the piece of section information for the



predetermined content.

18. The home server apparatus of Claim 17, wherein

the criterion information indicates a level of performance  
5 of said another home server apparatus, and

the judging unit judges negatively if the level of  
performance of said another home server apparatus indicated by  
the criterion information is equal to or higher than a level  
of performance of the home server apparatus, and judges positively  
10 if the level of performance of said another home server apparatus  
is lower than the level of performance of the home server apparatus.

19. An information supply apparatus for supplying a home server  
apparatus with section information that shows how contents are  
15 each divided into sections, the information supply apparatus  
comprising:

a storage unit operable to store therein a plurality of  
pieces of section information corresponding to a plurality of  
contents;

20 a receiving unit operable to receive, from the home server  
apparatus, identification information for identifying a  
predetermined content stored in the home server apparatus; and

a supply unit operable to, if a piece of section information  
corresponding to the predetermined content identified by the  
25 received identification information is stored in the storage  
unit, read the piece of section information from the storage  
unit and supply the home server apparatus with the read piece

of section information.

20. The information supply apparatus of Claim 19 further comprising:

5 a judging unit operable to judge whether to supply the home server apparatus with the piece of section information corresponding to the predetermined content, based on criterion information which is used for the judgment, wherein

the receiving unit further receives the criterion  
10 information from the home server apparatus, and

the supply unit supplies the home server apparatus with the piece of section information corresponding to the predetermined content if the judging unit judges positively.

15 21. The information supply apparatus of Claim 20, wherein the criterion information indicates a level of performance of the home server apparatus, and

the judging unit judges negatively if the level of performance indicated by the criterion information is equal to  
20 or higher than a level of performance stored in the storage unit, and judges positively if the level of performance indicated by the criterion information is lower than the level of performance stored in the storage unit.

25 22. The information supply apparatus of Claim 19, wherein the content is distributed by television broadcasting, the identification information indicates (i) a channel

that is a distribution source of the content and (ii) a broadcast time of the content,

the supply unit reads, from the storage unit, a piece of section information that corresponds to a content identified  
5 by the channel and the broadcast time indicated by the identification information, and supplies the home server apparatus with the read piece of section information.

23. An integrated circuit for a home server apparatus that  
10 receives section information, which shows how contents are each divided into sections, from an information supply apparatus, the home server apparatus including a storage unit, the integrated circuit comprising:

a recording unit operable to record a content into the  
15 storage unit;

a receiving unit operable to receive first section information, which corresponds to the recorded content, from the information supply apparatus;

a generating unit operable to generate second section  
20 information corresponding to the recorded content; and

a section information recording unit operable to record either the first section information or the second section information in the storage unit, as being in correspondence with the recorded content.

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24. A program for causing a computer to execute a process of recording contents and section information that shows how the

contents are each divided into sections, into a storage apparatus,  
the program comprising:

a recording step for recording a content into the storage  
apparatus;

5 a receiving step for receiving first section information,  
which corresponds to the recorded content, from an information  
supply apparatus for supplying the section information;

a generating step for generating second section information  
corresponding to the recorded content; and

10 a section information recording step for recording either  
the first section information or the second section information  
into the storage apparatus, as being in correspondence with the  
recorded content.